

CLAIMS

Having thus described our invention, what we claim as new, and desire to secure by letters patent is:

1 1. An apparatus for providing instant information service for a plurality of devices (13,
2 14, and 15) characterized by comprising:
3 network connecting unit (52) for fetching data from backend servers (41, 42, 43)
4 and packaging the data into XML elements;
5 cache (53) for caching the XML elements formed by said network connecting unit
6 (52) by packaging; and
7 controller (51), in response to a request for information service from a client, for
8 fetching relevant XML elements from cache (53), and for the XML elements that cannot
9 be fetched from the cache (53), instructing the network connecting unit (52) to fetch
10 corresponding data from backend servers and obtaining the XML elements formed by the
11 network connecting unit (52) by packaging, and finally packaging all the fetched XML
12 elements into a XML document and sending it back to the client.

1 2. The apparatus according to Claim 1, characterized in that the cache (53) comprises an
2 indexing mechanism for creating indices for all the XML elements stored in the cache
3 (53).

1 3. A method of providing instant information to variety of apparatuses (13, 14, and 15)
2 characterized in comprising the following steps performed on a server of:
3 receiving a request for information service from a device;
4 fetching XML elements which are relevant to the request for information
5 service from a local cache (53);

6 if no relevant XML elements are fetched from the local cache, fetching
7 corresponding data from backend servers, packaging the data into XML elements in the
8 local cache (53); and
9 packaging all the fetched XML elements into a XML document and sending it
10 back to the device.

1 4. The method according to Claim 3, characterized by further comprising a step of
2 creating indices for the XML elements stored in the cache (53).